



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,527	08/14/2001	Stephen H. Strange	112056-0032	8215

24267 7590 05/12/2004
CESARI AND MCKENNA, LLP
88 BLACK FALCON AVENUE
BOSTON, MA 02210

EXAMINER

PERVEEN, REHANA

ART UNIT	PAPER NUMBER
----------	--------------

2116

DATE MAILED: 05/12/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

4

Office Action Summary

Application No.

09/929,527

Applicant(s)

STRANGE ET AL.

Examiner

Rehana Perveen

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.7.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The proposed corrections to the drawing informalities have been considered and approved by the examiner. New corrected drawings are required in this application because informal drawings, accepted for examination, have been submitted. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, claim 14 recites the limitation "the file server" in line 3, and claim 15 also recites the limitation "the file server" in line 3. There is insufficient antecedent basis for this limitation in the claims. Claims 16 and 17, directly or indirectly, depend from independent claim 14. Therefore, claims 16 and 17 are also rejected under the same rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kang, Patent No. 6,434,696, in view of McKaughan et al, Patent No. 6,014,744.

As to claim 14, Kang teaches a system for performing a fast reboot of a computer having an array of attached disks and an internal memory, a boot mechanism that carries out full reboot operations on the computer (abstract), the boot mechanism adapted to perform either the full reboot operations or warm reboot operations (omission of configuration and auto batch files, col. 3 lines 23-26) wherein at least one of the full reboot operations is skipped (col. 2 lines 15-19).

However, Kang does not expressly teach the boot mechanism including a flag indicating which reboot to perform.

McKaughan et al teach a boot mechanism including a flag indicating which of the two reboot types to perform (abstract, col. 2 line 51 – col. 3 line 20, and col. 6 lines 11-15).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Kang and McKaughan et al because both are commonly directed to the booting process of a computer system for reducing the amount of time consumed by the booting process, and McKaughan et al's flag indication, when incorporated into Kang's system, would have further enabled improved integrity of the fast booting system.

As to claim 15, Kang teaches the full reboot operations that are skipped include a full test of the memory, a zeroing of the memory, a shutdown of a processor of the computer, and a loading of data from the array of disks that generate the operating system kernel at a predetermined kernel location in the memory (col. 2 lines 8-19 and col. 2 line 60 – col. 3 line 27).

As to claim 16, Kang teaches the memory includes a reserved storage space that stores a copy of data from which the operating system is loaded into the predetermined location in the memory during the warm reboot operations, the boot mechanism being adapted to retain uncleared the reserved storage space during the full reboot operations (abstract, col. 2 line 32 – col. 3 line 27, and col. 4 lines 27-35).

Art Unit: 2116

As to claim 17, neither Kang nor McKaughan et al expressly teach the copy of the data stored in the reserved storage space being a compressed image of the operating system kernel, the boot mechanism is adapted to load the compressed image into a space in memory outside the reserved storage space, and further comprising a boot loader to subsequently uncompressing and extracting the compressed image to generate the operating system kernel. However, one of ordinary skill in the art at the time of the invention would have readily recognized that such compressed image would have provided added memory space efficiency, such compression technique and its advantages being quite well known in the prior existing memory management systems.

Claims 1-13 and 22-32 are directed to the method of system claims 14-17, and claims 18-21 and 33-37 are directed to the computer readable medium of system claims 14-17. Kang and McKaughan et al, in combination, teach the system as set forth in claims 14-17. Therefore, Kang and McKaughan et al, in combination, also teach the method as set forth in claims 1-13 and 22-32. Further, Kang and McKaughan et al, in combination, also teach the computer readable medium as set forth in claims 18-21 and 33-37.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rehana Perveen whose telephone number is 703-305-8476. The examiner can normally be reached on 8:00am - 4:30pm.

Art Unit: 2116

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on 703-308-1159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Rehana Perveen', with a large, stylized loop at the end.

Rehana Perveen
Primary Patent Examiner
Technology Center 2100